

BOROUGH OF EVESHAM

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1970

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FOR THE YEAR, 1970

Mayor	...	Councillor R. Daniels
Deputy Mayor	...	Councillor H.T. Sharp
Chairman of the Public Health Committee	...	Alderman W.F. Kimberley
Chairman of the Housing Committee	...	Alderman E.A. Andrews
Town Clerk	...	N.F. Davies, B.A.

STAFF OF THE PUBLIC HEALTH DEPARTMENT

Medical Officer of Health	...	D.E. Thompson, O.B.E., M.B. B.Ch., D.T.M. & H., D.P.H.
Chief Public Health Inspector	...	E.C. Melton, M.A.P.H.I., A.R.S.H.
Additional Public Health Inspector	...	K. Handy, M.A.P.H.I. AIR POLLUTION (DIP).

ANNUAL REPORT FOR THE YEAR 1970

TO THE MAYOR, ALDERMEN & COUNCILLORS OF THE
EVESHAM BOROUGH COUNCIL

Mr. Mayor, Ladies and Gentlemen,

I have much pleasure in presenting the Annual Report on the state of the Public Health in the Borough of Evesham for the year 1970, and the work carried out by your Health Department.

The statistics relating to population, births and deaths, were supplied by the Registrar General. The figure for rubella vaccination of school girls was taken from the County Medical Officer's report for 1970. All the other statistics are from local sources.

I wish to thank members of the Council and their staff for their help and co-operation during the year.

I acknowledge, with thanks, the assistance I have received from Mr. E.C. Melton, Chief Public Health Inspector, and his staff, in compilation of this report.

I am, Mr. Mayor, Ladies and Gentlemen,

Your obedient servant,

D.E. Thompson, O.B.E., M.B., B.Ch.,
D.T.M. & H., D.P.H.

Medical Officer of Health.

Medical Officer of Health's Office,
"Lansdowne",
Port Street,
Evesham.

Telephone: Evesham 2941.

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SECTION A

STATISTICS AND SOCIAL CONDITIONS OF THE AREA

Area in Acres		-	3,958 acres.
Registrar General's estimate of	Mid 1970	-	13,190
resident population:	Mid 1969	-	13,170
	Mid 1968	-	13,150
	Mid 1960	-	12,450
	Census 1961	-	12,901
Number of inhabited houses at:	1st April 1970	-	4,724
	1st April 1969	-	4,656
	1st April 1968	-	4,564
	1st April 1960	-	4,112
Rateable value at 1st April 1970:		-	£609,122
Sum represented by a penny rate:		-	£ 2,410

VITAL STATISTICS

(1969 figures in brackets)

Population: The estimated population at 13,190 for Mid 1970 continued to show an almost static figure when compared with the estimated figure of 13,170 for Mid 1969. The 1961 census figure was 12,901.

Population Comparison, By Wards:- Between 1951 and 1961 census figures.

<u>Wards:</u>	<u>1951.</u>	<u>1961.</u>
East	2,832	2,543
Hampton	2,954	4,000
North	2,404	1,908
South	1,805	2,574
West	2,067	1,876
TOTAL:	12,062	12,901

<u>Live Births:</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Legitimate	102 (119)	113 (98)	215 (217)
Illegitimate	13 (5)	3 (10)	16 (15)
	<u>115 (124)</u>	<u>116 (108)</u>	<u>231 (232)</u>

Birth Rate: (Births per 1,000 population).

	<u>1970</u>	<u>1969</u>	<u>1968</u>	<u>1960</u>	<u>1970</u> (Eng. & Wales)
Crude	17.5	17.62	15.13	16.9	16.0 (16.3)
Comparability Factor	1.01	1.01	1.01	1.03	1.0 (1.0)
Standardised	17.7	17.80	15.28	17.4	16.0 (16.3)

Illegitimacy Rate: (Total live illegitimate births per 1,000 total live births).

<u>1970</u>	<u>1969</u>	<u>1968</u>	<u>1960</u>
69.3	64.7	45.2	19.0

<u>Still Births:</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Legitimate	- (2)	1 (1)	1 (3)
Illegitimate	- (-)	- (-)	- (-)

Still Birth Rate: (Still births per 1,000 live and still births).

<u>1970</u>	<u>1969</u>	<u>1968</u>	<u>1960</u>	<u>1970</u> (Eng. & Wales)
4.3	12.8	5.0	27.6	13 (13)

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and change. From the first settlers to the present day, the nation has evolved through various stages of development. The early years were marked by exploration and settlement, followed by a period of rapid expansion and industrialization. The American Revolution was a pivotal moment in the nation's history, leading to the establishment of a new government and the declaration of independence.

The 19th century was a time of great change and growth. The nation expanded its territory, and the economy began to diversify. The Civil War was a defining moment in the nation's history, leading to the abolition of slavery and the establishment of a more unified nation.

The 20th century has been a time of rapid change and growth. The nation has expanded its influence around the world, and the economy has continued to grow. The American Revolution was a pivotal moment in the nation's history, leading to the establishment of a new government and the declaration of independence.

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<u>Deaths:</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
	95 (94)	128 (114)	223 (208)

Death Rate: (Deaths per 1,000 population).

	<u>1970</u>	<u>1969</u>	<u>1968</u>	<u>1960</u>	<u>1970</u> (<u>Eng. & Wales</u>)
Crude	16.90	15.79	16.88	16.3	11.7 (11.9)
Comparability Factor	.69	.59	.65	.68	1.00 (1.0)
Standardised	11.66	9.31	10.97	11.1	11.7 (11.9)

<u>Major Causes of Deaths (by percentages):</u>	<u>1970</u>	<u>1969</u>	<u>1968</u>
1. Diseases of the circulatory system	63.7	56.3	64.0
2. Malignant Diseases (all forms)	13.5	18.8	12.2
3. Respiratory Diseases (excluding T.B.)	15.2	14.4	10.8
4. Accidents	1.3	1.9	3.6
5. Malignant Diseases (Lung & Bronchus)	4.0	1.9	2.3
6. Suicide & self inflicted injuries	1.3	0.5	1.4
7. Tuberculosis (all forms)	Nil	Nil	Nil

MATERNAL DEATHS:

Maternal Mortality (Maternal Deaths by 1,000 total live and still births):

<u>1970</u>	<u>1969</u>	<u>1968</u>	<u>1967</u>	<u>1966</u>
-	-	-	-	-

INFANT, NEONATAL & PERINATAL DEATHS:

<u>Infant Deaths (under 1 year of age):</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Legitimate	- (1)	- (3)	- (4)
Illegitimate	- (-)	- (1)	- (1)
	- (1)	- (4)	- (5)

<u>Neonatal Deaths (under 4 weeks of age):</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Legitimate	- (1)	- (3)	- (4)
Illegitimate	- (-)	- (1)	- (1)
	- (1)	- (4)	- (5)

<u>Early Neonatal Deaths (under 1 week of age):</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Legitimate	- (1)	- (2)	- (3)
Illegitimate	- (-)	- (1)	- (1)
	- (1)	- (3)	- (4)

<u>Perinatal Deaths (still births and deaths of infants under 1 week):</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Legitimate	- (3)	1 (3)	1 (6)
Illegitimate	- (-)	- (1)	- (1)
	- (3)	1 (4)	1 (7)

INFANT, NEONATAL AND PERINATAL MORTALITY RATES:

	<u>1970</u>	<u>1969</u>	<u>1968</u>	<u>1970</u> (<u>Eng. & Wales</u>)
1. Deaths of legitimate infants per 1,000 legitimate live births	-	18.4	21.1	17 (17)
2. Deaths of illegitimate infants per 1,000 illegitimate live births	-	66.7	-	26 (25)
3. Infant mortality rate (under 1 year)	-	21.6	20.1	18 (18)
4. Neonatal mortality rate (under 4 weeks)	-	21.6	15.1	12 (12)
5. Perinatal mortality rate (still births and deaths of infants under 1 week per 1,000 live and still births)	4.3	29.8	15.0	23 (23)
6. There were no infant deaths.				

CAUSES OF DEATH IN THE BOROUGH OF EVESHAM - 1970

CAUSES OF DEATH	Male	Female	Total
Malignant Neoplasm, Oesophagus	1	1	2
Malignant Neoplasm, Stomach	-	1	1
Malignant Neoplasm, Intestine	2	3	5
Malignant Neoplasm, Larynx	1	1	2
Malignant Neoplasm, Lung, Bronchus	6	3	9
Malignant Neoplasm, Breast	-	4	4
Malignant Neoplasm, Uterus	-	1	1
Malignant Neoplasm, Prostate	1	-	1
Other Malignant Neoplasms	5	-	5
Diabetes Mellitus	1	-	1
Anaemias	-	1	1
Multiple Sclerosis	-	2	2
Other Diseases of Nervous System	1	1	2
Chronic Rheumatic Heart Disease	1	1	2
Hypertensive Disease	1	3	4
Ischaemic Heart Disease	16	25	41
Other Forms of Heart Disease	10	20	30
Cerebrovascular Disease	22	34	56
Other Diseases of Circulatory System	4	5	9
Influenza	-	1	1
Pneumonia	6	10	16
Bronchitis and Emphysema	13	3	16
Other Diseases of Respiratory System	1	-	1
Appendicitis	-	1	1
Cirrhosis of Liver	-	1	1
Other Diseases of Digestive System	1	-	1
Nephritis and Nephrosis	1	-	1
Diseases of Musculo-Skeletal System	-	2	2
Symptoms and Ill Defined Conditions	-	1	1
All Other Accidents	1	2	3
Suicide and Self-Inflicted Injuries	-	1	1
TOTALS:	95	128	223

DEATHS BY AGE				
Age in Years	1970			1969
	M.	F.	TOTAL	
0 - 1	-	-	-	5
1 - 14	1	1	2	1
15 - 24	1	-	1	1
25 - 64	20	20	40	52
65 & over	73	107	180	149
TOTALS:	95	128	223	208

Of the 180 deaths recorded as 65 and over, 116 were, in fact, over the age of 75 years.

SECTION B

GENERAL PROVISION OF HEALTH SERVICES

- (a) Clinics and Treatment Services provided by the County Council or by the Regional Hospital Board through the agency of the County Council:

CLINIC	WHERE HELD	TIME
Child Health Clinic (including immunisation) Doctor in attendance	Evesham Clinic, Waterside	Fridays, 2.0 - 4.0 p.m.
Child Health Clinic (Health Visitors)	Evesham Clinic, Waterside	Wednesday, 2.0 - 4.0 p.m.
Toddler Clinic	Evesham Clinic, Waterside	2nd Wednesday morning in month. By appointment
Midwives' Ante-Natal Clinic	Nurses' Home, 103 High Street.	Tuesday, 2.0 - 4.0 p.m.
Relaxation and Mothercraft Class	Evesham Clinic, Waterside	Thursday, 2.0 - 4.0 p.m.
Cervical Cytology	Evesham Clinic, Waterside	Thursday mornings, by appointment
Audiometric Clinic	Evesham Clinic, Waterside	By appointment
School Clinic (Special cases seen by school doctor)	Evesham Clinic, Waterside	Friday mornings, by appointment
School Dental Clinic	Evesham Clinic, Waterside	By appointment
School Speech Therapy Clinic	Evesham Clinic, Waterside	Tuesdays, by appointment
School Ophthalmic Clinic	Evesham Clinic, Waterside	Monday after- noons, by appointment
Minor Orthopaedic cases (Physiotherapist)	Evesham Clinic, Waterside	1st Friday in month 2.0 - 4.0 p.m.
Specialist, clinics, medical, surgical, paediatric, etc.	Evesham General Hospital	By appointment
Chest Clinic	Worcester Royal Infirmary	By appointment
Child Guidance Clinic	Loves Grove, Worcester	By appointment
Chiropody Clinic	103 High Street, Evesham	By appointment

- (b) Health Visitors:

The County Council provided a service of health visitors in the Borough, working from the Evesham Clinic, Waterside, Evesham, throughout the year on general duties:-

Mrs. E.A. Bond, S.R.N., H.V. Cert. (part-time)
Miss J. Hufton, S.R.N., S.C.M., Q.N., & H.V. Certs.
Mrs. M. James, S.R.N., S.C.M., H.V. Cert., D.P.H.N. (U.S.A.) Reg. F.V.1.
Mrs. J. Lewis, S.R.N., S.C.M., H.V. Cert.

Also, two clinical assistants:-

Mrs. J. Doyle, S.R.N., R.M.N., S.C.M.
Mrs. P. Coombs, S.R.N. (part-time)

Telephone Number: Evesham 6630.

Training - Health Visitors:

The practical work programmes for two student Health Visitors from the North Gloucestershire Training College, Cheltenham, were carried out in Evesham under the supervision of the Field Work Instructor at the Clinic.

(c) The Midwifery Services and Home Nursing:

The County Council continued to provide domiciliary nursing and mid-wifery services.

(d) School Health Service:

The County Council continued to provide an extensive school health service throughout the district.

School children normally receive three medical examinations at school, at school entry at about 5 years old, at about 11 years old, and also before leaving school. At about 8 years of age a child receives a vision test, including colour vision, and at any age a child can be referred for a special medical examination if it is thought that there is any disability interfering with educational progress. Parents are always invited to attend school medicals and most of them do so.

There are also special clinics, audiometric, orthopaedic, ophthalmic, child guidance, speech therapy, etc., to which children can be referred for more detailed investigation and treatment. Special attention is given to those children who are not making satisfactory progress at school, and a careful and detailed assessment is made of any physical, mental, emotional or environmental causes which may be responsible, with a view to a remedy, if this is possible.

Handicapped Children: Special care is devoted to these children who are seen at least annually, and usually more frequently, often in their own homes. The main categories of handicapped children are the blind and partially sighted, the deaf and partially hearing, delicate children, including those suffering from diabetes and severe asthma and eczema, those with serious speech defects, the physically handicapped, the slow learners, children suffering from epilepsy, those who are emotionally disturbed or maladjusted.

During recent years there has been a notable change in the pattern of the physically handicapped children, because although the serious results of such diseases as poliomyelitis and tuberculosis are now rarely seen, there has been an increase in the number of children with congenital conditions who have survived because of advances in medicine and surgery, and are now coming to school with physical handicaps of varying degrees, some comparatively minor, some more serious.

The early recognition and the detailed assessment of handicaps has become a very important part of the school health service, because the earlier remedial measures are instituted, the more successful they are likely to be.

Special schools are available for certain categories of handicapped children, but many children with handicaps are able to continue their education at the ordinary schools.

School Dental Service: The school dental service continued its programme of dental health education, regular inspection of school children, and treatment as required.

Immunisation: The immunisation programme which normally starts at the age of 6 months is continued in the schools with booster doses of diphtheria and tetanus vaccine, and B.C.G. vaccination against tuberculosis, of boys and girls at the age of about 12 years, when a simple skin test has shown this to be necessary. Towards the end of 1970 a rubella (German Measles) vaccination programme, organised by the County Medical Officer, was commenced for girls of 13 years old. 53 girls in the schools of Evesham Borough received this vaccination in 1970, and plans were made to intensify the campaign in 1971. The purpose of this vaccination is to try and ensure that as many girls as possible are offered protection before reaching child bearing age, because of the risk to the baby if a mother contracts rubella during pregnancy. The possible complications of maternal rubella include death of the baby, or serious congenital defects such as cataract and other eye defects, heart disease, hearing loss, and mental retardation.

(c) Toddler Clinic:

This clinic which is held monthly at the Evesham Clinic, Waterside, commenced in June 1970.

The object is to provide for those who wish to make use of the service, a medical check-up, including vision and hearing tests, for children below school age, normally at the age of about 3 years. This provides an opportunity for the detection and, where possible, the correction of defects which would otherwise be unlikely to come to light until the routine medical examination at school entry at 5 years old. It also enables parents to discuss with the doctor any problems they may have encountered in connection with the development, progress and management of their children.

Progress checks on toddlers have, of course, been carried out by family doctors and in baby clinics for many years. The need for the new clinic arose from a realisation that, because of the claims of immunisation, and the special attention being paid to the younger babies at the weekly baby clinics, we were not able to devote sufficient time to the toddlers. Moreover, in recent years there have been notable advances in the technical methods of doing screening tests on young children, particularly in respect of vision and hearing.

At present, owing to shortage of medical staff, it is only possible to offer this service to a limited number of children but it is hoped that it will become more generally available in future years.

(f) Laboratory Facilities:

We are fortunate in having at Worcester Royal Infirmary an excellent Public Health Laboratory, directed by Dr. R.J. Henderson, who gives us early information of any micro-organisms detected in the Borough which are potentially dangerous to the Public Health, and also provides facilities for the bacteriological examination of any specimens or samples which may be necessary to detect carriers of disease or to prevent the spread of infectious diseases.

We also have the benefit of an excellent service from the County Analyst in connection with the bacteriological and chemical examination of samples of water, and the chemical analysis of any foodstuffs suspected of possible contamination.

(g) Hospital Services:

Hospitals under the control of the Regional Hospital Board which served this district were:-

Infectious disease	Newtown Hospital, Worcester
Tuberculosis	Newtown Hospital, Worcester
Maternity	Evesham Hospital (Avonside Branch) Ronswood Hospital, Worcester
Children's Diseases	Evesham Hospital (Briar Close Branch) Worcester Royal Infirmary Children's Hospital, Birmingham
Venereal Disease	Worcester Royal Infirmary
Mental Illness	Powick Hospital
General	Evesham Hospital (Briar Close Branch) Worcester Royal Infirmary Birmingham Hospitals
Aged Chronic Sick	Evesham Hospital (Avonside Branch)

(h) Immunisation Services:

The services provided by the County Council included provision for routine immunisation against smallpox, diphtheria, tetanus, whooping cough, poliomyelitis and measles. B.C.G. vaccination against tuberculosis was also offered to all school children at 12 - 13 years of age, if a simple test showed that this was desirable. For rubella vaccination, please see section on "School Health Service".

(i) Ambulance Service:

This was provided by the County Council, utilising the temporary ambulance station in Abbey Road in a building leased from the G.P.O.

(j) Health Education:

The Borough Council continued to contribute to the Health Education Council, and received copies of its journal, posters and general information about health education topics.

As in previous years, Mr. J.N. Pitts, County Health Education Officer, and the local health visitors, contributed to various health education programmes in schools and among various adult groups, covering subjects such as: - first aid, personal and general hygiene, infectious diseases, preparation for adult life, mothercraft, accident prevention, home safety, fire prevention, water safety, precautions with fireworks, smoking, alcohol and drugs, nutrition, sensible footwear, dental health, immunisation, etc.

(k) Services to the Elderly and Chronic Sick:

The County Council provided a health visiting service for the elderly and chronic sick:-

Mrs. M. Harthan, S.R.N., S.C.M., H.V. Cert.
Miss R. Davis, S.R.N., S.C.M., Q.N. and H.V. Certs.
Mrs. V. Evans, S.R.N.

The Borough of Evesham is now the special concern of Miss R. Davis, 33, Northwick Road, Evesham. (Telephone Number 2931.)

The voluntary services to the elderly, detailed in previous reports, continued during the year.

(l) Mental Health:

Mr. F.R. Ablett, Area Mental Welfare Officer, and his staff, provided an excellent service as in previous years.

The Social Club, known as the Gee Tee Club, continued to hold regular meetings on Wednesday evenings at the Bengeworth Church House. The Evesham, Pershore and District Society for Mentally Handicapped Children was also very active, meetings being held on the first Tuesday of the month at 7.30 p.m., in the Council Chamber, Evesham Rural District Council offices, Lansdowne, Port Street, Evesham, Chairman - Mrs. E. Hardaker, 79 Broadway Road, Evesham, Hon. Secretary - Mrs. Weaving, Hickley Piece, Little Comberton, (Telephone Number Elmley Castle 349).

(m) Home Help Service:

This was organised by the County Council. The area organiser for Evesham/Pershore/Upton was Miss Brewer (Evesham 3180.)

(n) Family Planning Association (Evesham Clinic):

Clinics were held on Monday evenings from 6.30 p.m. to 8.00 p.m., at the Evesham Clinic, Waterside. In October 1970, because of increased demand, two additional sessions were started on the second and fourth Wednesday evenings of each month at the same times, in addition to the clinics on Monday evenings. 334 people received advice, with a total of 986 attendances. 190 of those attending were first consultations at the Evesham Clinic (compared with 169 in 1969 and 92 in 1968.)

The object of these clinics is to give confidential medical advice on the spacing and limitation of families, and on difficulties, including infertility, in the marriage relationship. Pre-marital advice is also given. Experience has shown that this service is a valuable measure in the prevention of the physical and mental ill-health which may arise from lack of knowledge and advice.

SECTION C

SANITARY CIRCUMSTANCES OF THE AREA

WATER SUPPLY:

Water is supplied by the East Worcestershire Waterworks Company and is obtained from three sources, as follows:-

1. The principal supply is derived from six springs in the Middle Hill and Snowhill area of the Cotswolds. The springs are situated in upland agricultural and wooded land. The water issues from the Inferior Oolite and Cotswold sands on Upper Lias clay. After collection into chambers, the water gravitates to Broadway reservoir and is of excellent quality though rather hard.
2. An auxilliary supply is obtained from the Pinnock area in Gloucestershire, where the effluent from two springs is collected and pumped to the Broadway reservoir. This supply is situated in the River Thames watershed and the pumping is restricted.

At the Broadway reservoir, which is an enclosed chamber holding two and a half million gallons, the water is chlorinated with automatic equipment before entering the mains leading to the town.

3. At the northern end of the area water is supplied from deep boreholes at Sugarbrook near Bromsgrove. This supply is fluoridated as well as chlorinated.

It was not found necessary to restrict the supply during the year.

Only four properties - isolated farms and houses, with a population of twelve, are without mains water for domestic use, all other houses being connected to the mains. Four houses are supplied by standpipe.

Samples:

Eight bacteriological samples proved satisfactory on examination.

Summary:

The Borough is adequately supplied with wholesome water.

DRAINAGE AND SEWERAGE DISPOSAL:

With the exception of approximately 60 houses, all houses in the Borough are connected to the main sewerage system.

The sewerage of the Borough comprises:-

- (a) A high level system which discharges by gravity to the inlet channel of the old Sewage Disposal Works at Abbey Road, and
- (b) A low level system discharging to the low level pumping station. Sewage from this station is lifted to the inlet channel to join the gravity flow.

From the inlet channel all sewage passes through a coarse manually raked screen and thence flows up to three times dry weather flow are gravitated via a flow recorder and flow regulating equipment to the high level pumping station and then pumped to the treatment works. Sewage flows between three and ten times dry weather flow are separated and given settlement in four storm water tanks and then passed to the river. Sludge from these tanks is pumped along the rising main to the works (a distance of some $1\frac{1}{2}$ miles). All sewage in excess of ten times dry weather flow is passed directly to the river.

During 1970 some 315,709,000 gallons of sewage were given full treatment. Rainfall during the same period was 30.14 inches.

At the treatment works the coarse solid material is removed from the sewage by mechanical screens which are automatically controlled and heavy grit and silt is settled in detritus chambers and removed weekly by bucket dredgers.

Settlement of fine solids takes place in four rectangular tanks which are mechanically cleaned.

After settlement the sewage is sprayed by rotating distributors on to nine circular biological filters and the dissolved impurities are removed as the sewage percolates down through the filter media.

Before the effluent is finally discharged to the River Avon it is given a further period of settlement in four hopper bottomed upward flow humus tanks to remove the fine solid matter washed out from the biological filters. This humus sludge is pumped to the inlet of the works and removed with the primary sludge.

The sludge removed from the settlement tanks is first pumped to an open, cold digestion tank and then dried on underdrained drying beds. All the dried sludge removed from the beds is now spread on adjacent agricultural land.

Considerable difficulty is experienced in drying sludge during inclement weather and a 700 gallon tractor driven tanker is now employed in disposing of liquid digested sludge direct to orchards and open farmland.

Remarks:

In general the town is adequately served by an efficient sewerage system but the treatment works, which has now been in operation since 1957, is working beyond its design capacity. A general scheme of extension has now been approved by the Ministry of Housing and Local Government which includes additions to all sections of the present treatment plant and mechanical dewatering of sludge by filter pressing. Tenders have been invited and work is expected to commence in the spring of 1971. To help maintain a reasonable effluent standard in the interim period before the extensions are completed, a temporary spray irrigation system was installed in September 1967 whereby the bulk of the effluent from the biological filter is sprayed on to grassland where further oxidation and removal of humus solids takes place. In this way the overload on the humus tanks has, to a large extent, been relieved, and good results are still being achieved from this system for most of the year.

PUBLIC CLEANSING:

Trade and house refuse is collected once weekly, with the exception of certain shops and catering premises which, during the summer months, are serviced twice weekly. A charge of 5p. per bin is made for trade refuse.

Refuse was disposed of by controlled tipping at the Merrybrook Tip. A bulldozer is provided for levelling and earth spreading to control the tip and regular spraying and dusting with insecticide powder spraying was carried out to control insect and fly infestation.

Street cleansing was carried out by the street orderly system in the central area of the town and by mechanical sweeping in the remainder of the area. Gullies were emptied by the Council's own Gulley Emptying machine.

SWIMMING BATHS:

The only swimming bath open to the public in the area is the Corporation owned pool at Common Road, Evesham. The baths are open-air type and were open from May to September. Mains water is used to fill the pool and continuous mechanical filtration takes place through pressure sand filter with the addition of flocculating agent. Breakpoint chlorination is also a continuous process, soda ash being added to control acidity of water and alumina ferric used for flocculation.

Water was examined for free chlorine every two hours whilst the baths were open and a typical log sheet on a warm day with a heavy bathing load reads as follows:-

Temperature: 10 a.m. - 66°F. 2 p.m. - 66°F. 6 p.m. - 67°F.

No. of Bathers: Morning - 30. Afternoon - 150.

Condition of Water:

<u>Time</u>	<u>Free Chlorine.</u>	<u>pH.</u>	<u>Clarity.</u>
10.00 a.m.	1.5 - 1.5	7.5	Good
12 noon	1.5 - 1.5	8.0	"
2.00 p.m.	1.5 - 1.5	8.0	"
4.00 p.m.	1.0 - 1.0	8.0	"
6.00 p.m.	1.0 - 1.5	8.0	"
8.00 p.m.	1.0 - 1.5	8.0	"

SUMMARY OF SANITARY INSPECTIONS CARRIED OUT DURING THE YEAR

	No. of visits	Premises Involved	Informal Notices Issued	Notices Complied With
Nuisances	87	22	16	15
Obstructed drains and sewers	21	8	8	8
Defective Closets	7	3	3	3
Camping Sites	27	5	1	1
Common Lodging Houses	10	2	-	-
Miscellaneous	118	56	18	19
	370	96	46	46

COMMON LODGING HOUSES:

There are two registered common lodging houses within the area, one for twenty lodgers and the other for nine. The premises are in full occupation and use but the majority of residents are in regular employment and most have been living in the lodging houses for many years. No accommodation is provided for itinerants.

One of the lodging houses is scheduled for demolition and is in a poor state of repair. The other is very well maintained.

Ten inspections were made during the year.

SECTION D

HOUSING

Housing Position at the end of 1970.

Population 1961 Census	-	12,901
Estimated population (mid 1970)	-	13,190
Units of accommodation	-	4,796
No. of Persons per unit of accommodation	-	2.75
No. of Dwellings rated during year	-	72
No. of Dwellings built by Council during 1970-		45
Total No. of Council Houses built in post-war years	-	973
No. of caravan dwellings in permanent occupation (approx.)	-	100
No. of Council House applicants	-	421

Slum Clearance:

11 families were rehoused from unfit houses and 10 houses, which were subject to closing and demolition orders, were demolished.

137 inspections were made in connection with slum clearance properties.

Caravan Dwellings:

Approximately 100 caravans on one site in the district are used for residential purposes.

House Improvements:

During the year 29 grants were made as follows:-

Discretionary Grants	-	23
Improvement Grants	-	6

Inspection of Dwelling Houses:

Total No. of houses inspected for defect	-	92
No. of inspections made for this purpose	-	207
No. of dwelling houses made fit in consequence of informal action	-	41

It was not found necessary to serve any statutory notice requiring any owner to carry out repairs.

Qualification Certificates (Housing Act 1969)

11 applications for qualification certificates were received, 3 provisional and 4 certificates being issued.

FACTORIES ACTS 1937 - 1959

Details of inspections and action under the above Acts are contained in the Appendix to the report.

SECTION E

INSPECTION AND SUPERVISION OF FOOD

Inspections of premises under the Food & Drugs Act continued to be carried out by the Public Health Inspector.

Meat inspection was carried out at the local bacon factory and slaughterhouse, and the 100% inspection of carcasses and offal was maintained, which involved 578 visits to these premises. Slaughtering, however, was discontinued at the bacon factory from August onwards.

RECORD OF INSPECTION AND CONDEMNATION

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number Killed	1,975	25	151	6,358	19,645
Number Inspected	1,975	25	151	6,358	19,645
<u>All Diseases except T.B:</u>					
Whole carcasses condemned	-	-	-	2	30
Carcasses of which some part or organ was condemned	306	15	1	126	1,865
Approximate percentage of the number inspected affected with diseases other than T.B.	15%	60%	.7%	2%	10%
<u>Tuberculosis only:</u>					
Whole carcasses condemned	Nil	Nil	Nil	Nil	Nil
Carcasses of which some part or organ was condemned	Nil	Nil	Nil	Nil	98
Percentage of the number inspected affected with T.B.	-	-	-	-	.5%

Parasitic infestation, particularly of livers and lungs, was the chief cause of condemnation. Other causes including bruising, abscesses, cysts, pneumonia, nephritis, necroses, bone taint and decomposition.

7 cattle were affected by C. Bovis.

The weight of meat condemned was approximately 6½ tons, and this was disposed of at the bacon factory's digesting plant, or stored and collected by bi-product manufacturers.

Other Foodstuffs:

47 visits were made and the following were found to be unfit and were surrendered voluntarily:-

Meat at wholesale premises, retail shops and "imported" meats	-	19 cwt.	4 lbs.
Cooked Meats	-	1 cwt.	93 lbs.
Canned Meats	-		42 lbs.
Other Canned Foods	-	6 cwt.	92 lbs.
Fish (Fresh)	-	1 cwt.	27 lbs.
Fruit and Vegetables (Fresh)	-	7 cwt.	36 lbs.
Frozen Foods, due to refrigeration breakdowns	-	19 cwt.	65 lbs.
Other Foods	-	1 ton 1 cwt.	61 lbs.
Total:		3 tons 17 cwt.	84 lbs.

Unsound cans, and fruit and vegetables were disposed of by burial at the Council's refuse tip.

FOOD & DRUGS ACT

1. Food Hygiene (General) Regulations, 1960:

Premises to which Regulations Apply.	Total
Grocers	39
Greengrocers	13
Butchers	13
Bakers and Confectioners	8
Fried Fish Shops	4
Wet Fish Shops	5
Sweet Shops	12
Cafes and Snack Bars	16
Works Canteens	8
Licensed Premises, including Clubs	36
TOTAL:	154

The general standard of food premises in the area is satisfactory. It was, however, necessary to request a number of traders to carry out certain works of minor repair and redecoration during the year. 198 visits were made to these premises.

2. Milk Supplies:

No. of Dairymen and Purveyors registered	-	3
No. of Dairies registered	-	3

Only heat treated milk is retailed in the area, and during the year 35 samples of pasteurised milk and 2 samples of sterilized milk were taken by the County Health Department. All proved satisfactory.

No samples were taken of raw milk to identify Brucella Abortus.

Dairies and delivery vehicles were examined and 10 inspections made for this purpose.

3. Ice Cream:

No. of Retailers registered	-	47
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There were no manufacturers and the retailers sold only well known makes of this food.

4. Manufacture of Sausage, Potted, Pressed, Pickled & Preserved Foods:

Seven premises are registered for these purposes in the Borough including two large factories which produce sausage, pies and cooked meats. Regular visits of inspection were made to ensure that the foodstuff was handled hygienically. The general condition under which these foodstuffs are handled and produced can be regarded as satisfactory.

5. Liquid Egg (Pasteurising) Regulations:

There are no premises in the area to which these regulations apply.

6. Poultry Inspection:

No processing plants are established in the area - poultry inspection was only carried out in spot checks at retailers.

SECTION F

RODENT CONTROL

The following work was carried out under the Prevention of Damage by Pests Act, 1949:-

Properties	Type of Property	
	Non-Agricultural	Agricultural
1. Number of Properties in district.	5,700	14
2a Total number of Properties (including nearby premises) inspected following notification.	150	Nil
b Number infested by (i) rats	120	Nil
(ii) mice	30	Nil
3a Total number of properties inspected for rats and/or mice for reasons other than notification.	65	Nil
b Number infested by (i) rats	30	Nil
(ii) mice	9	Nil

THE UNIVERSITY OF CHICAGO

NAME		ADDRESS		CITY		STATE	
1	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
2	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
3	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
4	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
5	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
6	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
7	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
8	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
9	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		
10	Mr. J. H. Smith	1234 N. Main St.	Chicago	Ill.	U.S.A.		

SECTION G

OFFICES, SHOPS & RAILWAY PREMISES ACT 1963

(a) Registrations and General Inspections:

Class of Premises	Number of Premises registered during the year	Number of registered premises at end of year	Number of registered premises inspected
Offices	3	69	16
Retail Shops	12	109	47
Wholesale Shops, Warehouses	-	18	-
Catering establishments open to the public, canteens	1	24	8
Fuel storage depots	-	-	-
TOTALS:	16	220	71

Total number of visits to registered premises under the Act: 104.

(b) Analysis of Contraventions found:

Section	Number of Contraventions	Found	Section	Number of Contraventions	Found
4	Cleanliness	1	13	Sitting facilities	-
5	Overcrowding	-	14	Seating (sedentary workers)	-
6	Temperature	6	15	Eating facilities	-
7	Ventilation	-	16	Floors, passage and stairs	6
8	Lighting	3	17	Fencing exposed parts machinery	1
9	Sanitary Conveniences	3	18	Protection of young persons from dangerous machinery	-
10	Washing facilities	9	19	Training of young persons working at dangerous machinery	-
11	Supply of drinking water	-	23	Prohibition of heavy work	-
12	Clothing Accommodation	-	24	First Aid	3
				Other Matters	3
				TOTAL:	35

(c) Accidents reported in offices and shops:

At Retail shops - 2
At Catering establishments - 1

Causes of Accidents:

(1) Falls of persons - 2
(2) Handling goods - 1

PROBLEM 1		PROBLEM 2	
Let $f(x)$ be a function defined on the interval $[0, 1]$ such that $f(0) = 0$ and $f(1) = 1$. Suppose that f is continuous and that $f(x) \leq x$ for all $x \in [0, 1]$. Prove that $f(x) = x$ for all $x \in [0, 1]$.		Let $f(x)$ be a function defined on the interval $[0, 1]$ such that $f(0) = 0$ and $f(1) = 1$. Suppose that f is continuous and that $f(x) \geq x$ for all $x \in [0, 1]$. Prove that $f(x) = x$ for all $x \in [0, 1]$.	
SOLUTION:		SOLUTION:	
Consider the function $g(x) = f(x) - x$. Then $g(0) = 0$ and $g(1) = 0$. Since $f(x) \leq x$, we have $g(x) \leq 0$ for all $x \in [0, 1]$. Suppose that $g(x) < 0$ for some $x \in (0, 1)$. Then g attains a minimum at some point $c \in (0, 1)$. Since $g(0) = 0$ and $g(1) = 0$, we have $g(c) < 0$. But $g(c) = f(c) - c$, so $f(c) < c$. This contradicts the assumption that $f(x) \leq x$ for all $x \in [0, 1]$. Therefore, $g(x) = 0$ for all $x \in [0, 1]$, and $f(x) = x$ for all $x \in [0, 1]$.		Consider the function $g(x) = f(x) - x$. Then $g(0) = 0$ and $g(1) = 0$. Since $f(x) \geq x$, we have $g(x) \geq 0$ for all $x \in [0, 1]$. Suppose that $g(x) > 0$ for some $x \in (0, 1)$. Then g attains a maximum at some point $c \in (0, 1)$. Since $g(0) = 0$ and $g(1) = 0$, we have $g(c) > 0$. But $g(c) = f(c) - c$, so $f(c) > c$. This contradicts the assumption that $f(x) \geq x$ for all $x \in [0, 1]$. Therefore, $g(x) = 0$ for all $x \in [0, 1]$, and $f(x) = x$ for all $x \in [0, 1]$.	

PROBLEM 3		PROBLEM 4	
Let $f(x)$ be a function defined on the interval $[0, 1]$ such that $f(0) = 0$ and $f(1) = 1$. Suppose that f is continuous and that $f(x) \leq x^2$ for all $x \in [0, 1]$. Prove that $f(x) = x^2$ for all $x \in [0, 1]$.		Let $f(x)$ be a function defined on the interval $[0, 1]$ such that $f(0) = 0$ and $f(1) = 1$. Suppose that f is continuous and that $f(x) \geq x^2$ for all $x \in [0, 1]$. Prove that $f(x) = x^2$ for all $x \in [0, 1]$.	
SOLUTION:		SOLUTION:	
Consider the function $g(x) = f(x) - x^2$. Then $g(0) = 0$ and $g(1) = 0$. Since $f(x) \leq x^2$, we have $g(x) \leq 0$ for all $x \in [0, 1]$. Suppose that $g(x) < 0$ for some $x \in (0, 1)$. Then g attains a minimum at some point $c \in (0, 1)$. Since $g(0) = 0$ and $g(1) = 0$, we have $g(c) < 0$. But $g(c) = f(c) - c^2$, so $f(c) < c^2$. This contradicts the assumption that $f(x) \leq x^2$ for all $x \in [0, 1]$. Therefore, $g(x) = 0$ for all $x \in [0, 1]$, and $f(x) = x^2$ for all $x \in [0, 1]$.		Consider the function $g(x) = f(x) - x^2$. Then $g(0) = 0$ and $g(1) = 0$. Since $f(x) \geq x^2$, we have $g(x) \geq 0$ for all $x \in [0, 1]$. Suppose that $g(x) > 0$ for some $x \in (0, 1)$. Then g attains a maximum at some point $c \in (0, 1)$. Since $g(0) = 0$ and $g(1) = 0$, we have $g(c) > 0$. But $g(c) = f(c) - c^2$, so $f(c) > c^2$. This contradicts the assumption that $f(x) \geq x^2$ for all $x \in [0, 1]$. Therefore, $g(x) = 0$ for all $x \in [0, 1]$, and $f(x) = x^2$ for all $x \in [0, 1]$.	

SECTION H
PREVALENCE OF, AND CONTROL OVER, INFECTIOUS
AND OTHER DISEASES

Notifiable Diseases - 1970.

111 cases of measles were notified as compared with 6 in the previous year.

There were no deaths from this disease.

The age distribution of these cases was as follows:-

1 - 2 years	-	16 cases
3 - 4 years	-	32 cases
5 - 9 years	-	57 cases
Over 9 years	-	2 cases
Age not known	-	4 cases
		<u>111 cases</u>

These cases occurred during April, May, June, July, August and October of the year.

Other notifications were three cases of Infective Hepatitis and one case of Food Poisoning.

Effective immunisation procedures are available to minimise the risks of infection with diphtheria, whooping cough, tetanus, poliomyelitis and measles. If the control over these diseases is to be maintained, it is essential that all parents should avail themselves of the facilities for immunisation provided free of charge by family doctors and at the County Council clinics and in the schools.

Arrangements are made to give B.C.G. vaccinations against tuberculosis to school children aged about 13 years, when a simple test has shown this to be necessary.

TUBERCULOSIS:

No new cases of tuberculosis were notified during the year.

REGISTERED CASES OF TUBERCULOSIS, DECEMBER 1970.

	M.	F.	TOTAL ON 31/12/70	TOTAL ON 31/12/69	TOTAL ON 31/12/60
Pulmonary	10	12	22	27	60
Non-Pulmonary	1	-	1	3	1
TOTAL:	11	12	23	30	61

APPENDIX

FACTORIES ACTS 1937 & 1948

PART I OF THE ACT

1. Inspections for the purposes of provisions as to health:-

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(1) Factories in which Sec. 1,2,3,4, & 6 are to be enforced by Local Authorities.	4	1	-	-
(2) Factories not included in (1) in which Sec. 7 is enforced by the Local Authority.	81	33	-	-
(3) Other premises in which Sec. 7 is enforced by the Local Authority (excluding outworkers' premises).	4	10	-	-
TOTAL:	89	44	-	-

2. Cases in which defects were found:-

Particulars	Number of cases in which defects were found				No. of cases in which prosecutions were instituted.
	Found	Remedied	Referred		
			to H.M. Insp.	by H.M. Insp.	
Want of cleanliness	-	-	-	-	-
Overcrowding	-	-	-	-	-
Unreasonable temperature	-	-	-	-	-
Inadequate ventilation	-	-	-	-	-
Ineffective drainage of floors	-	-	-	-	-
<u>Sanitary Conveniences:</u>					
(a) Insufficient	-	-	-	-	-
(b) Unsuitable or defective	4	4	-	-	-
(c) Not separate for sexes	-	-	-	-	-
Other offencies against the Act	-	-	-	-	-
	4	4	-	-	-

PART VIII OF THE ACT - OUTWORK

During the year 75 outworkers were engaged in the manufacture of small metal wares (spectacle cases) and one in the altering of wearing apparel. Working conditions were, in general, found to be quite satisfactory.

